REMARKS

Claims 1 - 3 have been amended.

Claims 4 - 6 have been added.

Claims 1 - 6 are present in the subject application.

In the Office Action dated March 15, 2002, the Examiner has rejected claims 1 - 3 under 35 U.S.C. §103(a). Favorable reconsideration of the subject application is respectfully requested in view of the following remarks.

Initially, the specification has been amended to provide serial numbers for the cross-referenced applications and to correct minor typographical errors within the brief description of drawings section to refer to Figs. 22A - 22E and 24. In addition, the Appendix originally filed with the subject application is recorded on a CD-R as required by an Examiner in one of the co-pending applications. The CD-R is submitted herewith, while the specification has been further amended to refer to the CD-R. No new matter has been added.

The Examiner has rejected claims 1 - 3 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,983,214 (Lang et al). Briefly, the Examiner takes the position that the Lang et al patent teaches the claimed limitations except for the feature of when adding a content entity to a compilation, referencing the reference information to determine if the content entity is mutually exclusive of other content entities. The Examiner further alleges that the Lang et al patent teaches that if record duplication is a concern, then prior to each insertion, a search of the CD-ROM and the hard drive data buckets is necessary in order to ensure that duplicate records are not inserted into the tree. The Examiner takes the further position that this information implies the record which is not duplicated is inserted into the tree and the system should compare data in each record to ensure the record is not duplicated. The Examiner asserts that it would

have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the Lang et al system in accordance with the record duplication teaching.

The Examiner cites various sections of the Lang et al patent to support the rejection. However, none of the citations correspond with the Lang et al patent. In fact, the cited sections and rejection actually correspond to U.S. Patent No. 5,813,000 (Furlani). Accordingly, Applicants contacted the Examiner by telephone for clarification of this issue, and gratefully acknowledge the courtesies extended by the Examiner. During the telephone discussion, the Examiner confirmed that the rejection and corresponding rationale were based on the Furlani patent and that the indication of the Lang et al patent was an inadvertent error. Since the Examiner cited the Lang et al patent in the Office Action, Applicants respectfully request the Examiner to cite that patent on form PTO-892 to further indicate consideration of the patent and enable citation of the patent on the front page of a patent issuing from the subject application.

In view of the above, claims 1 - 3 have actually been rejected under 35 U.S. §103(a) as being unpatentable over U.S. Patent No. 5,813,000 (Furlani) for the above-discussed rationale indicated in the rejection. Briefly, the Furlani patent discloses a novel B tree data structure for use in conjunction with a tertiary storage system. The tertiary storage system utilizes three levels of memory hierarchy: primary memory, such as RAM, read-write secondary storage, such as disk memory; and lower speed and less expensive mass storage, such as a CD-ROM. A novel B tree is utilized to access data stored in two or more types of memory, such as a CD-ROM memory and a disk drive memory, and adapts for the provision of updated data stored on the hard disk which either replaces or supplements data stored on the CD-ROM. The B tree includes, for each data bucket, a pointer for both a CD-ROM and a disk drive location, and are, in certain embodiments, used in conjunction with a bit mask to indicate the presence of valid

data in a first one of the memories, such as CD-ROM. If desired, a bloom filter is associated with data stored in the second memory type, such as a magnetic disk, in order to speed accesses.

In contrast, the present invention is directed toward a web-based system for adding content to a content object stored in a data repository as a group of hierarchically related content entities. Each non-container content object is preferably stored as a separate entity in the data repository. As the user selects desired objects for inclusion in the content object, the system arranges the objects hierarchically. The system then creates a file object defining the content object that contains an outline of the container and non-container entity selected, their identifiers, order and structure. An aspect of the invention is to provide permission checking to prevent certain content entities from appearing in the same compilation as other content entities. Permission checking includes associating each container and non-container with any mutually exclusive containers or non-containers. For example, such association may be achieved by defining a set of rules specifying containers and/or content entities that are mutually exclusive. Upon selection of a container or non-container to add to the compilation, the permission checking procedure determines if the container or non-container is mutually exclusive of any other containers or content objects. If so, the permission checking procedure then analyzes the compilation to determine whether any of the other mutually exclusive container or non-containers already exists in the compilation. If so, then the selected container or non-container is not added to the compilation. Otherwise, the content is added.

This rejection is respectfully traversed since the Furlani patent does not disclose, teach or suggest the features recited in the independent claims. For example, the Furlani patent does not disclose, teach or suggest the features recited in independent claims 1 - 3 of storing reference information for each content entity identifying any other content entities that are mutually

exclusive with that content entity, referencing the reference information to determine if a content entity to be added is mutually exclusive of the other content entities, and adding the content entity if the identified content entities do not exist in the compilation. However, in order to expedite prosecution of the subject application, independent claims 1 - 3 have been amended to further clarify the mutual exclusivity of the content entities by reciting the feature of the reference information indicating exclusion of the content entity from compilations including any of the other content entities.

The Furlani patent does not disclose, teach or suggest these features. Rather, the Furlani patent discloses a novel B tree data structure for use in conjunction with a tertiary storage system utilizing three levels of memory hierarchy (i.e., primary memory such as RAM; read-write secondary storage, such as disk memory; and lower speed, less expensive mass storage, such as a CD-ROM). A bit mask having a size equal to the number of records stored in the CD-ROM data bucket is maintained for each CD-ROM data bucket. Each bit in the mask corresponds to a record in the data bucket. The bit mask is used to determine if a record has been deleted from the CD-ROM (See Column 4, lines 52 - 57). If record duplication is a concern during insertion of records into the tree, then prior to each insertion, a search of the CD-ROM and the hard drive data buckets is necessary in order to ensure that duplicate records are not inserted into the tree (See Column 5, lines 60 - 63). Thus, the Furlani patent discloses a bit mask with each bit indicating the presence or deletion of a corresponding record on the CD-ROM. There is no disclosure, teaching or suggestion of the bit mask identifying any relationship between records or, for that matter, specifying other records that are mutually exclusive with a record as recited in the claims.

Although the Furlani patent discloses a search of the CD-ROM and the hard drive data buckets to ensure that duplicate records are not inserted into the tree (See Column 5, lines 60 - 63), this technique basically prevents insertion of a record into the tree when that same record already resides on the CD-ROM or hard disk drive. Thus, there is no disclosure, teaching or suggestion of utilizing reference information to identify for a particular content entity other mutually exclusive content entities and adding the particular content entity to a compilation when no identified mutually exclusive content entities exist in the compilation as recited in the claims. In other words, the Furlani patent merely discloses preventing insertion of the same or duplicate records in the tree, whereas the claims recite the features of reference information specifying content entities that are not permitted to be included in the same compilation and adding a content entity to a compilation when the compilation does not include any of the content entities specified in the reference information as not being permitted in the same compilation with that content entity. Since the Furlani patent does not disclose, teach or suggest the features recited in independent claims 1 - 3 as discussed above, these claims are considered to be in condition for allowance.

Newly added claims 4 - 6 depend from claims 1, 2 and 3, respectively, and, therefore, include all of the limitations of their parent claims. These dependent claims are considered to be in condition for allowance for substantially the same reasons discussed above in relation to their parent claims and for further limitations recited in these claims. For example, claims 4 - 6 recite the feature of the reference information being in the form of rules. The Furlani patent does not disclose, teach or suggest reference information specifying mutually exclusive content entities as discussed above or, for that matter, the reference information being in the form of rules as recited

in these claims. Since the Furlani patent does not disclose, teach or suggest the features recited in claims 4 - 6 as discussed above, these claims are considered to be in condition for allowance.

In addition to the foregoing, the proposed modification of the Furlani patent does not render the claimed invention obvious. Initially, the Furlani patent is directed toward a novel B tree data structure for use in conjunction with a tertiary storage system as described above. A bit mask is utilized to determine the presence or deletion of a corresponding record in a CD-ROM data bucket. In contrast, the present invention is directed to a web-based system that prevents mutually exclusive content entities from being included in the same compilation. The Furlani patent is limited to preventing duplicate records from being inserted into a tree by searching the memory devices for those records. There is no information specifying mutual exclusivity of a particular record with any other record, nor is there any reason for one of ordinary skill in the art to modify the Furlani system to do so other than prohibited hindsight derived from Applicants' own disclosure. Thus, the proposed modification of the Furlani patent does not render the claimed invention obvious.

The application, having been shown to overcome the issues raised in the Office Action, is considered to be in condition for allowance and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

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Amendment
U.S. Patent Appln. No. 09/489,265

APPENDIX

SPECIFICATION

The following are the amended paragraphs of the specification with markings to show the changes made, where brackets ('[ ]') indicate removed text and underlining indicates additional text.

The amended paragraphs beginning at page 1, line 10.

--**A System and Method for Creating Compilations of Content**
Serial No. [__/___,___] 09/489,134 (Our reference Docket # STL000012US1)

Method and System for Adding Content to a Content Object Stored in a Data Repository
Serial No. [__/___,___] 09/489,576 (Our reference Docket # STL000013US1)

Method and System for Adding User-Provided Content to a Content Object Stored in a Data Repository
Serial No. [__/___,___] 09/488,976 (Our reference Docket # STL000014US1)

Method and System for Moving Content in a Content Object Stored in a Data Repository
Serial No. [__/___,___] 09/488,971 (Our reference Docket # STL000015US1)

Method and System for Removing Content in a Content Object Stored in a Data Repository
Serial No. [__/___,___] 09/489,087 (Our reference Docket # STL000016US1)

Prerequisite Checking in a System for Creating Compilations of Content
Serial No. [__/___,___] 09/488,969 (Our reference Docket # STL000017US1)

Volume Management Method and System for a Compilation of Content
Serial No. [__/___,___] 09/489,090 (Our reference Docket # STL000019US1)

Method and System for Calculating Cost of a Compilation of Content
Serial No. [__/___,___] 09/489,143 (Our reference Docket # STL000020US1)

Method and System for Storing Hierarchical Content Objects in a Data Repository
Serial No. [__/___,___] 09/489,570 (Our reference Docket # STL000021US1)

File Structure for Storing Content Objects in a Data Repository
Serial No. [__/___,___] 09/489,730 (Our reference Docket # STL000022US1)

Amendment
U.S. Patent Appln. No. 09/489,265

Providing a Functional Layer for Facilitating Creation and Manipulation of Compilations of Content
Serial No. [__/___,___] 09/489,605 (Our reference Docket # STL000023US1)

A Hitmask for Querying Hierarchically Related Content Entities
Serial No. [__/___,___] 09/489,133 (Our reference Docket # STL990182US1)

A Method and Configurable Model for Storing Hierarchical Data in a Non-Hierarchical Data Repository
Serial No. [__/___,___] 09/489,561 (Our reference Docket # STL000025US1)

Reference to a Computer Listing Appendix

Appendix A to this application is set forth on a single compact disk and the material recorded thereon is incorporated by reference herein. The following file is recorded on the compact disc: file name: AppendixA.txt; file size: 107kB; date of creation: May 16, 2002.--

The amended paragraph at lines 6 - 7 of page 6.

--Figs. 22A - 22E [22D] represent the system administrator interface of an embodiment of the present invention.--

The amended paragraph at lines 10 - 11 of page 6.

--Fig. 24 [25] is a state diagram representing the states of a user, request and CBO at various stages of the process for creating compilations of content.--

Amendment
U.S. Patent Appln. No. 09/489,265

CLAIMS

The following are the amended claims with markings to show the changes made, where brackets ('[ ]') indicate removed text and underlining indicates additional text.

--1(Amended). A method for preventing mutually exclusive content entities stored in a data repository from being included in a compilation of content entities, comprising the steps of:

[Storing] storing reference information for each content entity identifying [any] other content entities that are mutually exclusive with that content entity, wherein said reference information indicates exclusion of the content entity from compilations including any of the other content entities;

[When] when adding a content entity to a compilation, referencing the reference information to determine if the content entity is mutually exclusive of other content entities, and

if so, determining if any of the identified other content entities exists in the compilation of content, and

[If] if not, adding the content entity to the compilation, and

[If] if so, not adding the content entity to the compilation.

2(Amended). A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for preventing mutually exclusive content entities stored in a data repository from being included in a compilation of content entities, the method steps comprising [the steps of]:

[Storing] storing reference information for each content entity identifying [any] other content entities that are mutually exclusive with that content entity, wherein said reference

information indicates exclusion of the content entity from compilations including any of the other content entities;

[When] when adding a content entity to a compilation, referencing the reference information to determine if the content entity is mutually exclusive of other content entities, and

if so, determining if any of the identified other content entities exists in the compilation of content, and

[If] if not, adding the content entity to the compilation, and

[If] if so, not adding the content entity to the compilation.

3(Amended). A system for preventing mutually exclusive content entities stored in a data repository from being included in a compilation of content entities, comprising:

[Means] means for storing reference information for each content entity [content entity] identifying [any] other content [entity] entities that [is] are mutually exclusive with that content entity, wherein said reference information indicates exclusion of the content entity from compilations including any of the other content entities;

[Means] means for referencing the reference information when adding a content entity to a compilation, to determine if the content entity is mutually exclusive of other content entities[,];

[Means] means for determining if any of the identified other content entities exists in the compilation of content[,]; and

[Means] means for adding the content entity to the compilation if none of the other content entities exists in the compilation, and means for not adding the content entity to the compilation if any of the other content entities exists in the compilation.--